REMARKS

Claims 1, 3-10 and 12-19 are pending in this application.

As to the above amendment to independent claim 1, lines 14-15, the amendment makes express in the claim what already is inherent by virtue of the express definition of "electronic manual" in Applicant's specification, at page 2, lines 3-6. For consistency, the other independent claims 9, 10, 14, 17, 18 and 19 also have been so amended. No change in meaning results by virtue of making express what was understood, and the purpose of the amendment is so that the Examiner will better and more clearly appreciate that the Porter secondary reference does not relate to an "electronic manual" or to an "electronic manual search system" but rather to other kinds of computerized searching.

The above amendment to the independent claims to incorporate the definition of "reference number" likewise is the same variety of amendment, making express in the claim what already is inherent by virtue of the express definition of "reference number" in Applicant's specification, at page 5, lines 8-11. No change in meaning results by virtue of making express what was understood, and the purpose of the amendment is so that the Examiner will better and more clearly appreciate that Ishimaru, the primary reference, fails to disclose use of an automatically-generated "reference number", and that Applicant's claimed "reference number" does not mean a user-applied bookmark.

These definition-related amendments are appropriate for entry after-final, and the favorable exercise of the Examiner's discretion is respectfully requested in entering the amendment, because the amendment makes no change in meaning but merely expressly recites the definition of "electronic manual" and "reference number", respectively, that was already implicitly part of the claim.

At page 3, paragraph 4 of the Office Action, Claims 1, 3-10 and 12-19 have been rejected under 35 U.S.C. 103(a) as unpatentable over Ishimaru in view of Porter, Jr. As to independent claims 9 and 17, the Examiner admits that "Ishimaru does not explicitly disclose searching based on the order of reference number." (pages 4 & 6 of Final Office Action). As to independent claims 1 and 14, the Examiner admits that "Ishimaru doesn't disclose the search process unit searches contents of each part in order based on the reference number." (Pages 5

& 7 of Final Office Action.) However, Applicant's claimed invention is more removed from Ishimaru than the Examiner has admitted.

Applicant's claimed invention of claim 1 is a certain "electronic manual search system including <u>an electronic manual</u> which is composed of a plurality of parts." (Applicant's Claim 1, emphasis added.) The "<u>electronic manual consists of: (1) information which is to be searched by a help function of an application program; or (2) searching of an electronic dictionary</u>." (Id., emphasis added.) Applicant's inventive system comprises "<u>a reference number table which stores, for each part of the electronic manual, a reference number expressing how many times the part is referred to by a user</u>". (Id., emphasis added.) The "<u>reference number is generated by automatically counting a topic which has been referred to as a search result in the past and the reference number records the number of times the respective topic has been referred to</u>." (Id., emphasis added.) The inventive system also comprises "a search process unit which searches contents of the parts based on a search condition; <u>wherein the search process unit searches contents of each part in order based on the reference number</u>". (Id., emphasis added.) Also included in the inventive system is "a search result display unit which displays parts which resulted from the search process unit, in order based on the reference number." (Id.)

First, the differences between Ishimaru are the presently claimed invention are more significant than the Examiner has recognized. Ishimaru is about <u>displaying</u>, and does not teach or disclose the inventive <u>searching</u> of the presently claimed invention. The Examiner has cited Figs. 2 and 10 of Ishimaru. Fig. 2 of Ishimaru includes step S3, in which "the area to be marked is selected using the mouse cursor" followed by " 'mark add' is selected from the menu" (Fig. 2, S4). Ishimaru's method depends on a user <u>affirmatively marking an area, using his mouse cursor, and, further clicking on the area "mark" on his menu bar, and further, either selecting "add mark" or "remove mark</u>." (Ishimaru, Fig. 2 and col. 6, lines 54-60.) Ishimaru is no better than the conventional searching method reported at page 4, lines 15+ of Applicant's specification. In Ishimaru, the bookmark is attached to the topic only when a user explicitly designates to "attach

the bookmark" to the topic displayed as a search result.[1] Furthermore, when search operation is performed according to Ishimaru using thus attached bookmarks, a topic is identified and displayed at one time which corresponds to a bookmark.[2] Therefore, in a conventional search method such as Ishimaru, it is impossible to display topics simultaneously which correspond to a plurality of bookmarks which satisfy a search condition, meaning that it is substantially impossible to give priority to extract (or display) topics which have been consulted many times in the past.[3] Furthermore, the conventional searching method of Ishimaru must always search the whole of the electronic manual when the search is performed, because each topic does not have information related to frequency of reference of itself (that is, importance of information).[4] Ishimaru fails to disclose the claimed "reference number" of Applicant's invention. Ishimaru is **not** a "reference number" as that term is defined in Applicant's specification, page 5, lines 8-11.

The presently claimed invention is highly advantageous compared to Ishimaru, because using the present invention, topics can be searched in descending order of past reference frequency of topic.[5] Ishimaru cannot be said to provide this search-advantage of the present invention. Rather, Ishimaru's searching proceeds conventionally, and it is only once the results are searched and available for display that Ishimaru applies his color-izing feature to the display of the results. There is no indication that Ishimaru is first searching for topics coded red (15 times/month), before searching for topics coded yellow (10 times/month). (See Ishimaru Figs. 2, 3 and 12) Clearly, Ishimaru is not arranging his search priority based on the color-code of the topic. He is pulling up search results as if they were unmarked, and then he is colorizing the results he has gotten. See, e.g.,

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[1]Applicant's specification, Description of the Related Art, page 4, lines 18-21.

[2]Id., lines 21-23.

[3]Id., lines 23-27.

[4]Id., sentence bridging pages 4-5.

[5]Applicant's specification, page 15, last sentence.

Ishimaru Fig. 3, S9-S10 ("determine the color of the mark based on the mark number" followed by "the mark is displayed on screen"). The point of Ishimaru is for a user to visually see how often he is searching for a word, to see which words represent his weak points. (Ishimaru, col. 8, lines 59-62.) Ishimaru is not using frequency of a word being referred to, or total number of times of a word being referred to, at the point where the search itself is being performed. The frequency or total number of times the word is referred-to only is used in Ishimaru at the point of displaying the already-searched and retrieved information on screen.

Thus, as the Examiner has admitted, Ishimaru fails to disclose searching based on the order of reference number. However, as set forth above, Ishimaru is more removed from the present claimed invention than the Examiner has admitted, and does not even generate and use Applicant's claimed "reference number" and "reference number table" in the first instance.

Porter, the secondary reference to which the Examiner resorts, fails to supply a person of ordinary skill in the art with what is missing from Ishimaru. First, it is forced and artificial to suggest that someone of ordinary skill in the art would be influenced to modify Ishimaru based on Porter. The present invention and Ishimaru are examples of using an "electronic manual"; Porter does not disclose using an "electronic manual."

The Examiner's proposed reading of Porter is **not** how a person of ordinary skill in the art would objectively read Porter. Such a person would not be motivated by Porter to modify Ishimaru in the direction that the Examiner proposes. The part of Porter on which the Examiner relies is <u>Porter's Background</u> section, where Porter generally outlines certain search types, namely, "Sequential Search Method"; "Searching an Ordered Table"; and "Binary Search." The few lines from Porter relied upon by the Examiner are from the part of col. 1 that discusses "Searching an Ordered Table." <u>Porter's invention</u> does not relate to that kind of searching, but rather, to binary searching[6] and performing a sequential search.[7] Therefore, the reasonable reading Porter that a person of ordinary skill in

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[6]Porter, see, e.g., col. 4, line 68; col. 5, line 35; col. 8, line 34.

[7]Porter, col. 8, line 35.

the art would have is to read the lines cited by the Examiner from Porter as background, and, reading the rest of Porter and seeing that Porter's invention concerns a different kind of searching, he would lack reason to be focused on the few lines from the Background as the Examiner proposes, for making the rejection. It is only the Examiner's wanting to try to find an element missing from Ishimaru, that arbitrarily brings the Examiner to the part of Porter col. 1 that relates to "Searching an Ordered Table." That is not how a person of ordinary skill in the art of Applicant's claimed invention would have been thinking. Such a person would have no reason to focus on the lines in col. 1 of Porter relied-upon by the Examiner, and after reading Porter he would lack motivation to modify Ishimaru because he would be thinking that Porter and Ishimaru relate to <u>different kinds of searching</u> (binary searching and performing a sequential search in the case of Porter, which is **not** what is being done by Ishimaru (who is dictionary searching such as an English-Japanese dictionary)).

Another incorrect assumption underlying the obviousness rejection is that the Examiner apparently is treating the "record keys" of Porter, col. 1, line 49, as the same as the mark numbers 7w-2 in Fig. 10 of Ishimaru. The Examiner's treatment of Porter's "record keys" as akin to Ishimaru's "mark numbers" is incorrect.

Part of Fig. 10 of Ishimaru shows:

WORD	MARK NUMBER
construct	1
book	20
trouble	14
despite	7

In Ishimaru, the mark number is a function of how many times the user marked the word. As words become more heavily marked in Ishimaru, the color in which they are displayed changes, as seen in Ishimaru Fig. 4, showing mark number 7C-1 and color 7C-2:

MARK NUMBER	COLOR
10	YELLOW
20	RED

The point of Ishimaru is that, once a word has been marked at a first certain incremental level (such as 10 times), rather than it being displayed "regularly" it is

highlighted (such as in yellow highlighting), and when it is marked more heavily at a next incremental level (such as 20 times), it is then highlighted more (such as in red).

Porter provides no useful disclosure or teaching relative to such a system of Ishimaru. Trying to combine Ishimaru and Porter would be artificial and would not naturally follow, for a person of ordinary skill in the art. Porter does not relate to working with mark numbers or anything akin to Ishimura's mark numbers or bookmarking, or changing the color or style in which a word appears.

Rather, Porter assumes a search method that accepts an argument a and tries to find a record whose key is a. (Porter, col. 1, lines 14-15.) Porter explained that the simplest form of such a search is the sequential search, which examines each key in turn, and upon finding one that matches the search argument, its index is returned. (Porter, col. 1, lines 26+.) In the passage cited by the Examiner, Porter continues:

<<If the table is stored in ascending or descending order of the record keys, there are several techniques that can be used to improve the efficiency of searching. This is especially true if the table is of fixed size. One advantage in searching a sorted file over searching an unsorted file is in the case where the argument key is absent from the file. In the case of an unsorted file, n comparisons are needed to detect this fact. In the case of a sorted file, assuming that hte argument keys are uniformly distributed over the range of keys in the file, only n/2 comparison (on the average) are needed. This is because we know that a given key is missing from a file which is sorted in ascending order of keys as soon as we encounter a key in the file which is greater than the argument.>>

(Porter, col. 1, lines 48-61.) That is, the lines of Porter on which the Examiner relies teach only about the case where an argument key (record key) is absent, as is seen a few lines down from the lines cited by the Examiner. Then, in such a case where an argument key is absent, Porter's invention involves grouping a doubly-linked list of data elements into smaller list segments by using a simple mathematical relationship. (Porter, col. 8, lines 27-29.)

Porter would fail to help a person of ordinary skill in the art reading Ishimaru. Even with Ishimaru and Porter, such a person still would fall short of Applicant's presently claimed invention. Porter is predicated on a search method that accepts an argument a and tries to find a record whose key is a. In Ishimura,

no one is <u>searching</u> for words with a mark number of 10 or a mark number of 20. The <u>search</u> in Ishimura is in no way a function of the mark number. The mark number only comes into play <u>after</u> the search has been performed in Ishimura. The point in Ishimura is how to more prominently <u>display</u>, visually, a word as a function of how much marking (or how much or how frequent retrieval) it has received. The objectives in Ishimura and Porter are different and non-combinable.
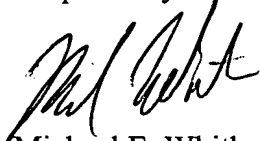
The above remarks also apply to the other rejected claims. For simplicity, at this time Applicant has not set forth further distinguishing remarks for the other claims. In view of the above, reconsideration and withdrawal of the obviousness rejection are respectfully requested.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1, 3-10 and 12-19 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephone or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041 (Whitham, Curtis & Christofferson).

Respectfully submitted,

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